

Application No. 09/915,532
Amendment under 37 CFR 1.111
Reply to Office Action dated November 4, 2004
March 1, 2005

AMENDMENTS TO THE CLAIMS

Please substitute the following claims for the pending claims with the same numbers, respectively:

Claim 1 (Cancelled):

Claim 2 (Currently amended): An image processing method,
comprising the steps of:

separating image data into luminosity data and chromaticity
data; and

changing a rate of smoothing of the chromaticity data and a
rate of smoothing of the luminosity data according to a variation
of the luminosity data in two-dimensional coordinate space

~~The image processing method as defined in claim 1, wherein:~~
a first reference value is specified as to a degree of the
variation of the luminosity data; and

in image areas where the variation of the luminosity data is
smaller than the first reference value, the chromaticity data is
subjected to the smoothing first and, if necessary, the
luminosity data is subjected to the smoothing thereafter.

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Claim 3 (Currently amended): An image processing method,
comprising the steps of:

separating image data into luminosity data and chromaticity
data; and

changing a rate of smoothing of the chromaticity data and a
rate of smoothing of the luminosity data according to a variation
of the luminosity data in two-dimensional coordinate space

~~The image processing method as defined in claim 1, wherein:~~

a first reference value is specified as to a degree of the
variation of the luminosity data; and

in image areas where the variation of the luminosity data is
smaller than the first reference value, the rate of the smoothing
of the chromaticity data is made greater than the rate of the
smoothing of the luminosity data.

Claim 4 (Original): The image processing method as defined
in claim 2, wherein:

a second reference value is specified as to a degree of the
variation of the luminosity data so that the second reference
value is smaller than the first reference value; and

in image areas where the variation of the luminosity data is

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larger than the second reference value, the luminosity data is not subjected to the smoothing.

Claim 5 (Original): The image processing method as defined in claim 3, wherein:

a second reference value is specified as to a degree of the variation of the luminosity data so that the second reference value is smaller than the first reference value; and

in image areas where the variation of the luminosity data is larger than the second reference value, the luminosity data is not subjected to the smoothing.

Claim 6 (Original): The image processing method as defined in claim 2, wherein

in image areas where the variation of the luminosity data is larger than the first reference value, the luminosity data is not subjected to the smoothing and the chromaticity data is not subjected to the smoothing.

Claim 7 (Original): The image processing method as defined in claim 3, wherein

in image areas where the variation of the luminosity data is

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larger than the first reference value, the luminosity data is not subjected to the smoothing and the chromaticity data is not subjected to the smoothing.

Claim 8 (Cancelled):

Claim 9 (Cancelled):

Claim 10 (Currently amended): An image processing device, comprising:

a data separator section for separating image data into luminosity data and chromaticity data;

a chromaticity noise removing section for smoothing the chromaticity data;

a luminosity noise removing section for smoothing the luminosity data; and

a smoothing rate computing section for computing a variation of the luminosity data in two-dimensional coordinate space and computing, for each unit area of an image, a rate of the smoothing of the chromaticity data and a rate of the smoothing of the luminosity data according to the variation as outputs to the chromaticity noise removing section and the luminosity noise

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removing section respectively

~~The image processing device as defined in claim 9, wherein~~
the smoothing rate computing section compares the variation of the luminosity data with a first reference value specified as to a degree of the variation of the luminosity data, and in image areas where the variation of the luminosity data is smaller than the first reference value, computes the rates given by such equations that the rate of the smoothing of the chromaticity data becomes larger than the rate of the smoothing of the luminosity data.

Claim 11 (Original): The image processing device as defined in claim 10, wherein

the smoothing rate computing section compares the variation of the luminosity data with a second reference value specified as to a degree of the variation of the luminosity data so that the second reference value is smaller than the first reference value, and in image areas where the variation of the luminosity data is larger than the second reference value, computes the rates given by such equations that the luminosity data is not subjected to the smoothing.

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Claim 12 (Original): The image processing device as defined in claim 10, wherein

in image areas where the variation of the luminosity data is larger than the first reference value, the smoothing rate computing section computes the rates given by such equations that the luminosity data is not subjected to the smoothing and the chromaticity data is not subjected to the smoothing.

Claim 13 (Original): The image processing device as defined in claim 10, wherein

the smoothing rate computing section includes a reference specification section for assigning variable values to the reference values depending on an external input.

Claims 14-22 (Cancelled):